Jason Newton

**Title: Evelllll Kinevel Date: \_3-21-11\_\_\_\_**

**Problem:** What angle will launch Mr. Evelll the farthest?

**Hypothesis:** As the launch angle approaches 38 degrees, the distance jumped will reach its maximum.

**Procedure**:

* Equipment: Books, Hot Wheels Car and Track, tape, tables, stands, accelerator

1. Stack books

2. Tape track to books

3. Place accelerator somewhere on track

4. Place angle at the end of the track

5. Shoot car through the accelerator and record car displacement while in air

6. Change angle until the best angle is found to cut through wind resistance

* Variables
  + Manipulated Variable:  Launch Angle
  + Responding Variable:  Distance
  + Controlled Variables:  Acceleration and Velocity

**Data:**  The longest distance was 2.1 meters. And longest suspended time was .5 seconds.

**Data Analysis:**

The data shows that the closer the projectile is to 38 degrees, the further it is launched. As the launch angle moves away from 38 degrees, the displacement is lessened.

**Conclusion:**

The hypothesis, as the launch angle approaches 38 degrees, the distance jumped will reach its maximum, was supported because the two longest launches were 35 and 40 degrees.

This relates/applies to the real world because wind resistance *is* a factor. If wind resistance was not a factor, then 45 degrees would be the best angle of choice.

Further testing needs to happen to determine whether or not 38 degrees is the best angle to launch; in order to obtain maximum distance.